BEFORE THE PUBLIC UTILITIES COMMISSION
OF THE STATE OF CALIFORNIA

Order Instituting Rulemaking to Oversee the Resource Adequacy Program, Consider Program Refinements, and Establish Annual Local Procurement Obligations.	Rulemaking 11-10-023

CALIFORNIA INDEPENDENT SYSTEM OPERATOR CORPORATION REPLY COMMENTS ON APRIL 9, 2014 WORKSHOP PRESENTATIONS AND PROPOSALS ON FLEXIBLE CAPACITY AND RESOURCE ADEQUACY

The California Independent System Operator Corporation ("ISO") respectfully submits these reply comments to other parties' comments on the presentations and proposals regarding the flexible capacity procurement framework and resource adequacy rule changes for 2015 that were discussed at the California Public Utilities Commission ("CPUC" or "Commission") workshop on April 9, 2014.[1] The ISO's reply comments address these areas:

1) The ISO's 2014 Preliminary Flexible Capacity Needs Assessment Methodology and Assumptions;
2) The treatment of storage resources and resources with long transition times;
3) The requirement that demand response resources provide flexible capacity on a sub-LAP basis;
4) Information that should be provided by the ISO; and
5) The CHP parties' proposed modifications to the Energy Division Staff's outage replacement proposal.

[1] The ISO submits these reply comments in accordance with the ruling of the Administrative Law Judge at the workshop on April 9, 2014.

I. THE ISO'S 2014 PRELIMINARY FLEXIBLE CAPACITY NEEDS ASSESSMENT METHODOLOGY AND ASSUMPTIONS

Many parties offered comments and suggestions regarding the ISO's 2014 Preliminary Flexible Capacity Needs Assessment. The ISO notes that TURN and Southern California Edison find the ISO's application of the allocation methodology is reasonable.[2] However, other parties, including PG&E, Sierra Club, and AReM propose that the ISO make very specific changes to the study methodology. For example, PG&E recommends that the ISO should refine the study methodology to better reflect the effect of distributed generation on load shape; reduce the potential year-to-year volatility in results caused by reliance on only one year of historic load, wind, and solar data; and consider the treatment of controllable generation from renewable sources.

As discussed in the ISO's initial comments, "the flexible capacity procurement obligation will be a new addition to the RA program and will, just as the RA program has, evolve over time."[3] Part of this evolution is the ISO's annual flexible capacity needs assessment. The ISO will enhance the study process each year through additional analysis of the system, and modeling the need for flexible capacity. As the ISO proposed in its Flexible Resource Adequacy Criteria and Must-Offer Obligation stakeholder initiative, the ISO will run an annual stakeholder initiative to discuss the assumptions used in the model and consider potential modifications or enhancements to the model. As such, the ISO believes that the parties' recommendations regarding changes to the

[2] SCE comments, p. 15 and TURN comments, p.5.

[3] ISO Comments, p. 3.

ISO's study methodology are appropriately addressed in the ISO's stakeholder process, and not in the CPUC's annual resource adequacy proceeding. This is the existing process that the ISO uses for determining its local capacity requirements study. The ISO has proposed to use the same process for the flexible capacity needs assessment that it uses for the local capacity study. No party has provided a valid reason why the study process should be done differently in the case of the flexible capacity.

Sierra Club asserts that the ISO should include an additional 597 MW of achievable energy efficiency in the assessment of the flexible capacity needs. As noted above, the ISO believes that this issue is more appropriately addressed in the ISO stakeholder process. The ISO used a "no additional achievable energy efficiency scenario." Integrating resources such as energy efficiency into the ISO flexible capacity needs assessment requires assumptions about how the energy efficiency resource moves on a minute-by-minute basis. During the ISO's flexible capacity needs assessment stakeholder process, there was no stakeholder recommended approach regarding whether or how the ISO should model additional achievable energy efficiency in the context of the flexible capacity study, nor is there one in the current proceeding.[4] For example, while energy efficiency may reduce system peak, further analysis is needed to determine the load shape impacts of any additional achievable energy efficiency or, stated differently, what effect energy efficiency has on the "belly of the

[4] Sierra Club references an Office of Ratepayer Advocates' study. However, this study states that part of the analysis was conducted for all twelve months, while some only focused on July hours. Additionally, the ORA study does not provide a clear description about how energy efficiency is modeled across days and months.

duck."[5] For example, it is likely that a reduction in the net load at the head of the duck will be matched by a comparable drop in the belly.

Moreover, further analysis is needed to determine how to address the seasonality of energy efficiency. For example, efficient air conditioning may have important impacts in the summer months. However, as shown in the ISO's flexible capacity needs assessment, the ISO's need for flexibility is much lower in summer months compared to the non-summer months. If air conditioning load is not a factor in changing the net load curve, then it does not impact the need for flexible capacity. Accordingly, until these types of questions are answered, the addition of achievable energy efficiency as proposed by Sierra Club is premature and could not be adopted at this time. The ISO believes that the issue of how achievable energy efficiency should be treated is best considered in future ISO flexible capacity needs assessments, and such assessments should take into account measured qualities of energy efficiency as appropriate, including seasonality and load shape. The ISO will discuss these matters in the ISO stakeholder process.

Finally, AReM asserts that "[s]ignificant issues remain with the CAISO assessment" [6] and that "the Commission and CAISO should defer any direct enforcement of the flexible capacity requirements for 2015."[7] The "issues" identified by AReM are red herrings that the ISO believes can and will be

---

[5] For example, it is likely that a reduction in the net load at the head of the duck will be matched by a comparable drop in the belly. This would result in no reduction of the three-hour maximum net-load ramps.

[6] AReM Comments, p. 3

[7] *Id.* at 5.

resolved before a final decision is made in this proceeding. For example, the ISO has now provided the Commission with the seasonal percentages needed in each flexible capacity category.

II. TREATMENT OF STORAGE RESOURCES AND RESOURCES WITH LONG TRANSITION TIMES

The ISO supports TURN's recommendation regarding the determination of the amount of flexible capacity provided from energy storage resources. Specifically, TURN recommends that the Commission adopt the proposed counting conventions proposed by the ISO for storage resources "on an 'initial' basis… and then revisit storage EFC issues again in next year's review of RA programs."[8]

Sierra Club and PG&E support adopting the Energy Division proposal, including the proposed treatment of resources with transition times of up to 45 minutes.[9] The ISO does not agree with that recommendation. As the ISO stated in its initial comments, "[t]he ISO and parties need more time to determine the operational impacts of transition times and recommends that the Commission defer this particular item to a later date."[10] Neither the Sierra Club nor PG&E provided any evidence or explanation why adoption of the Energy Division Staff's proposed treatment of these resources at this time constitutes good public policy that leads to sound operational practices. Sierra Club asserts that including the pumping load from pumped hydro resources "appropriately accommodates the

---

8 TURN Comments, p. 4.

9 PG&E Comments, p. 12 and Sierra Club's Comments, p. 4.

10 ISO Comments, p. 22.

operating limitations of pumped hydro resources without creating legitimate reliability concerns",[11] but offers no operational data or other facts to support this assertion. It is important that the ISO, as the system operator, have the opportunity to assess the "legitimate reliability concerns" of including pumping load as flexible capacity. Because the ISO has not yet had an opportunity to do so, it is premature to adopt such a "turn around" provision without first understanding the operational and reliability impacts.

III. IT IS REASONABLE AND TECHNICALLY APPROPRIATE TO REQUIRE DEMAND RESPONSE RESOURCES TO PROVIDE FLEXIBLE CAPACITY ON A SUB-LAP BASIS

In its comments, EnerNOC appears to confuse resource adequacy planning with actual system operations. EnerNOC states:

> Staff's Revised Draft Proposal, in conformance with the Proxy Demand Resource (PDR) construct of the CAISO, requires EFC to be delivered on a sub-LAP basis. FRACMOO is a system, not a local, requirement. DR resources are distributed resources. This requirement, for DR resources to be delivered on a sub-LAP basis, due to the design of PDR, will make it more difficult for DR resources to provide EFC.[12]

Resource adequacy is a planning function. However, EnerNOC argues that because flexible capacity is currently deemed a "system need" for resource adequacy planning purposes, then incongruously, a flexible resource should have the option to be configured and operated as a broadly dispersed "system resource," *i.e.,* a single resource with a load curtailment capability throughout the ISO balancing authority area unconstrained by network topology. Contrary to EnerNOC's concern, the resource adequacy planning function does not supplant

[11] Sierra Club Comments, p. 5.

[12] EnerNoc Comments, p. 6.

the fact that the ISO operates a nodal market. Identifying distributed resources by sub-LAP ensures that (1) congestion is not exacerbated by the aggregation of distributed resources across congested interfaces, and (2) the load distribution factors of a given demand resource can be reasonably assigned to a limited set of pricing nodes contained within a sub-LAP where intra-sub-LAP congestion has been *de minimus*. Thus, contrary to EnerNOC's statement, it is reasonable to require demand response resources to provide flexible capacity on a sub-LAP basis, to enable the ISO to efficiently and reliably operate the system.

IV. ISO PROVIDED INFORMATION

PG&E and TURN have asked that the ISO make available all non-confidential working papers and data that the ISO relied on for the Preliminary 2014 Flexible Capacity Needs Assessment.[13] The ISO has done so. Specifically, the ISO has released materials and data used for making the monthly flexible capacity needs determination, the CPUC contribution to the change in load, and seasonal determinations for each flexible capacity category. This data is available at http://www.caiso.com/informed/Pages/StakeholderProcesses/FlexibleCapacityRequirements.aspx. Additionally, when the ISO releases the Final 2014 Flexible Capacity Needs Assessment, it will identify and detail any changes from the preliminary assessment.

AReM states that the ISO not only needs to publish an Effective Flexible Capacity list, but it should also indicate what categories of flexible capacity a

[13] PG&E Comments, p. 2 and TURN Comments, p. 5.

resource can provide.[14] The ISO will publish and EFC list, but will rely on the resource owners to determine what category or categories of flexible capacity may be appropriate for their resource and what must-offer obligation they are willing to accept under a bilateral contract.

v. CHP PARTIES' PROPOSED MODIFICATIONS TO ENERGY DIVISION STAFF'S OUTAGE REPLACEMENT PROPOSAL SHOULD NOT BE ADOPTED

CHP Parties state that under the QF/CHP Settlement, the power purchase agreements with CHP resources are unit contingent and, that under these agreements, the CHP resource has no obligation to deliver capacity separate and distinct from the energy it delivers. CHP Parties note that the Staff proposal provides that "[f]or scheduled outages that are approved after the compliance filing due date, the SC of the resource will still be responsible for outage replacement as specified in the CAISO's replacement rule." They state that to the extent that the buyer is the SC for the CHP resource, this statement is true. However, they contend that where the SC for the resource is an entity other than the buying utility, the statement is not true. CHP Parties claim that if a CHP resource must plan an outage in less than 45 days because its industrial host is suspending operations, that outage is permitted under the terms of the *pro forma* PPAs, and the CHP resource does not have an obligation to supply replacement capacity to the buyer during that period. They request that the Staff proposal be revised to read as follows: "[f]or scheduled outages that are approved after the compliance filing due date, the SC of the resource will be responsible for outage

[14] AReM Comments, p. 6.

replacement to the extent required by the contract between the parties, by FERC order, and by CAISO tariff and rules."

The ISO supports language proposed by Energy Division Staff, and the Commission should not adopt CHP Parties' proposed modifications to Staff's outage replacement proposal. Although the QF/CHP settlement contracts may include provisions for providing notice of maintenance outages to the buyer, this does not excuse those CHP suppliers that are providing resource adequacy capacity and participating in the ISO's markets from adhering to the ISO maintenance outage Tariff provisions. A party cannot avoid compliance with the ISO Tariff by executing a third party contract. In fact, CHP facilities' *pro forma* agreement requires CHP facilities to comply with the ISO Tariff.

A CHP resource is not obligated to replace resource adequacy capacity in instances where its output is reduced because the industrial host reduces energy consumption or changes production periods. However, the unit contingent nature of the resource is not a factor in determining a CHP facility's availability for purposes of providing replacement capacity. Rather, the ISO's replacement requirement addresses only maintenance outages where the resource adequacy capacity will be unavailable because the resource is scheduled to take a maintenance outage during the resource adequacy month.

CHP Parties' comments appear to suggest that FERC exempted CHP facilities from the replacement rule requirement because they are unit contingent. That is incorrect. In approving the ISO's outage replacement protocols, FERC found that "…CAC and EPUC have not identified an operational difference for

CHP resources that would require an exemption from the Replacement Requirement." [15] Additionally, FERC found "that commenters' concerns relating to the unit contingent nature of CHP facilities, which may incur unexpected outages, are misplaced, as this scenario does not fall within the scope of planned maintenance outages that are subject to the Replacement Requirement."[16] Further, FERC stated: "CAC states that CHP resources sometimes need to schedule a maintenance outage on less than three days' notice and during peak hours. We find that this is not a convincing reason to exempt these resources from a Replacement Requirement."[17] Finally, FERC stated "[w]e disagree that the CHP resources should be exempt from the Replacement Requirement because of penalties or obligations contained in their contracts. Provisions negotiated as part of a third party contract should not exempt CHP resources from their obligations under the Tariff."[18]

For the reasons stated above, the ISO supports a clarification to the Energy Division Staff's proposal so that it would state that "[f]or scheduled outages that are approved after the compliance filing due date, the SC of the resource will still be responsible for outage replacement to the extent required by the CAISO tariff rules and FERC orders."

---

15 *California Independent System Operator Corporation,* 141 FERC ¶61, 135 at P 56 (2012).

16 *Id.*

17 *Id.* at P 57.

18 *Id.* at P 59.

VI. CONCLUSION

For the foregoing reasons, the ISO respectfully requests that the CPUC issue an order consistent with the ISO's reply comments.

Respectfully submitted,

By*: /s/ Beth Ann Burns*

Roger E. Collanton
General Counsel
Anthony Ivancovich
Deputy General Counsel
Anna A. McKenna
Assistant General Counsel
Beth Ann Burns
Senior Counsel
California Independent System
Operator Corporation
250 Outcropping Way
Folsom California 95630
Tel.: (916) 351-4400
Fax.: (916) 608-7222
bburns@caiso.com

Attorneys for the California Independent
System Operator Corporation

Date: April 25, 2014